Appendix N: Agricultural Phosphorus Targets for the Wisconsin River TMDL

Need

Agricultural load allocations (LA) have always been challenging to effectively communicate due to the inherent variability across the landscape and because the traditional approach to the LA lumps multiple nonpoint sources together into one number, expressed in total pounds, for a subbasin. This lumped LA, even if broken down between its main components of non-permitted urban, background, and agricultural loads, does not effectively allow the LA to target or translate reduction requirements into needed implementation practices and actions. To address this issue, the WDNR has developed a framework for communicating agricultural LAs, developed using the watershed model SWAT (Soil and Water Assessment Tool), into edge of field total phosphorus targets (TP Targets) that can be implemented by a field-scale model called SnapPlus (Soil Nutrient Application Planner).

The framework involves translating LAs, defined in the TMDL as delivered loads to a receiving water, into upland phosphorus targets (lbs./acre/yr.) that reflect the phosphorus yields at the edge of a field. This provides agricultural practitioners such as county conservationists, nutrient management specialists, crop consultants, and producers a more meaningful expression of the TMDL LAs; one that is expressed in the same manner as their implementation tools.

SnapPlus is a widely used software program to prepare NRCS 590 standard compliant nutrient management plans. The program helps farmers make the best use of their on-farm nutrients, allowing informed and justified commercial fertilizer purchases. Two critical features of this program related to water quality are its ability to generate, by field, a phosphorus index (PI) value and to calculate soil erosion, based on the revised universal soil loss equation (RUSLE2). By calculating potential soil and phosphorus runoff losses on a field-by-field basis while assisting in the economic planning of manure and fertilizer applications, Snap-Plus provides Wisconsin farmers with a tool for protecting soil and water quality. Snap-Plus is supported by the UW-Madison Department of Soil Science, DATCP, NRCS, UW-Extension, and DNR, and is available for download at http://snapplus.wisc.edu/.

It is important to note that while the PI represents the phosphorus loss from a field, it represents the loss under the critical soil and slope conditions. The TMDL reduction goals and TP Targets are based on average slope and predominate soil type. As such, PI values (e.g. PI = 6) and the TP Targets are not directly comparable.

Compliance with TP Targets is voluntary unless the TP Targets are adopted by rule and become a performance standard. See s. NR 151.005, Wis. Adm. Code. Cost share requirements are not impacted by adoption of TP Targets.

Usage

Meeting TMDL Goals on Agricultural Lands

The TMDL divided the Wisconsin River basin (WRB) into discrete subbasins. Each of these subbasins has different baseline phosphorus loads, and therefore the load reductions vary depending on which subbasin an agricultural producer is located in. Each subbasin has a TP Target, expressed in pounds per acre, that defines the allowable annual average phosphorus loss for fields in a subbasin that meets the water quality standards of downstream receiving waters based on the allocations assigned in the TMDL. To accomplish this, practitioners need to first locate which TMDL subbasin or 12-digit hydrologic unit (HUC12) their field(s) is in (Figure 1). Second, producers use SnapPlus to create or modify a database for each field within their farm to reflect: (a) actual (i.e., not planned) cropland practices (e.g., tillage, crop rotation, nutrient applications) that have been implemented along with the overall crop rotation, and (b) ensure all fields within the SnapPlus "Fields" menu use the predominant soil and not the critical soil type (SnapPlus defaults to critical soil type since that is what is used in calculations for the P-Index). Predominant soil type information is available from:

- Wisconsin 590 Interactive maps - http://www.manureadvisorysystem.wi.gov/app/interactive
- Web Soil Survey - http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

Within SnapPlus, users can select the P Trade Report. The P Trade Report is designed to aggregate data in SnapPlus to quantify the annual amount of phosphorus that is delivered from specific farm fields under different management practices. The SnapPlus P Trade Report reports annual phosphorus losses. These annual phosphorus losses need to be averaged over the crop rotation and then divided by the acres of the field to get an average annual phosphorus loss expressed in lb. /acre/yr.

Once this is completed, SnapPlus P Trade Report output for individual fields can be compared to the TMDL TP Targets for the TMDL subbasin or HUC12 within which the field is located (Tables 1.1 and 1.2). If the average annual phosphorus loss (as reported using the P Trade Report) for a given crop rotation exceeds the TP Target in Tables 1.1 and 1.2, then that crop rotation exceeds the TMDL agricultural TP Target and thus the LA, and additional reductions are needed.

> For example, for subbasin 2 the baseline TP load is 2.4 lbs./acre/yr. This reflects the baseline assumption in the TMDL and is the starting point to which reductions were applied. Under the current water quality criteria, subbasin 2 needs a 12% reduction to meet the LA. This results in a TP Target of 2.1 lbs./acre/yr. A producer has a 100-acre field in subbasin 2 and based on historic cropping practices and current management, the field averages over the rotation a phosphorus loss of 3.5 lbs./acre/yr. This means that to achieve the TMDL load allocation, the field needs to reduce its phosphorus loss by 1.4 lbs./acre/yr. Different management options can be simulated in SnapPlus until the average annual phosphorus loss reported in SnapPlus is less than the TP Target of 2.1 lbs./acre/yr.

Please note that currently a critical assumption of SnapPlus phosphorus loss calculations is that farm fields do not have ongoing gullies or concentrated flow channel erosion. If fields have gullies or concentrated flow erosional features, the P Trade report phosphorus loss calculation is not accurate and the field's phosphorus loss will exceed the TP Target.

If Figure 1 is too coarse to locate the field's TMDL subbasin, the Wisconsin River TMDL theme of the interactive Watershed Restoration Viewer (type "watershed restoration viewer" into the search bar at http://dnr.wi.gov) can be used instead—click the "Layer" tab on the left-hand panel, then locate the layer called "TMDL Subbasins" under "Specific TMDLS, Wisconsin River". Similarly, users can identify which HUC12 their field is in by using the interactive Water Condition Viewer (type "water condition viewer" into the search bar at http://dnr.wi.gov)—click the "Layer" tab on the left-hand panel, then locate the layer called "12-digit HUCs" under "Water Resources, Hydrologic Delineations, Federal Hydrologic Unit Codes (HUC)".

Every subbasin in Tables 1.1 and 1.2 has a TP Target listed. However, for basins with very little agriculture, the tables that list load allocations for agriculture in the TMDL report show agricultural load allocations of zero pounds per year due to the exclusion of agriculture in these basins in the TMDL model. The spatial representation of the SnapPlus-based model used to derive Tables 1.1 and 1.2 in this Appendix used a finer resolution representation of agriculture, where at least 900 m^2 of agriculture was identified for every subbasin in the WRB, even for those in the headwaters region. Therefore, a TP Target has been calculated for every subbasin, regardless of whether the original TMDL defines an agricultural load allocation.

Site-Specific Criteria (SSC)

Allocations for the Wisconsin River Basin TMDL were calculated using two different phosphorus criteria. The first set of criteria are based on the current phosphorus criteria outlined in Wisconsin Administrative Code s. NR 102.06. The second set of allocations use recommended site-specific criteria for Lakes Wisconsin, Castle Rock, and Petenwell. Once the TMDL is approved by US EPA, the reductions under the existing criteria (s. NR 102.06, Wis. Adm. Code) should be used. If, and when, the recommended SSC are adopted and approved by US EPA, the reductions under the SSC should be used instead. If there is any question about which set of TP Targets should be used, under either the existing criteria or SSC, contact the TMDL staff at WDNR listed on the WDNR website: **https://dnr.wi.gov/topic/tmdls/**

Water Quality Trading (WQT) and TP Targets

WQT may be used by Wisconsin Pollutant Discharge Elimination System (WPDES) permit holders to demonstrate compliance with water quality-based effluent limitations (WQBELs). Generally, WQT involves a point source working with another party to achieve less costly pollutant reduction, yielding a greater reduction in pollutants than if a trade had not occurred. In other words, WQT provides point sources with the flexibility to offset their pollutant load reductions by providing the resources to reduce that same pollutant from other sources in the watershed.

Point sources can receive credit for reducing phosphorus loss on agricultural fields (WDNR, 2013a, pp. 10-15). Crediting will depend on whether the agricultural field is currently exceeding the credit threshold of phosphorus. The TP Target listed in Table 1.1 is the credit threshold for the corresponding subbasin. If the agricultural field is currently exceeding the credit threshold, adoption of additional conservation practices can generate "interim credits" for a maximum of five years for reductions that occur above the credit threshold; and if the practices reduce the agricultural field to below the credit threshold, "long-term credits" are generated. The difference between interim and long-term credits is that five years after practice implementation, interim credits are no longer available for point sources to offset their reduction and after five years only long-term credits can be given for reductions below the credit

threshold (i.e., going above and beyond what is required to meet load allocation goals).

> Example: Using the methodology described above, a farm field has a baseline phosphorus loss of 4 lbs./acre/yr. The TP Target is 2 lbs./acre/yr. As with the TMDL LA, the TP Target is also equivalent to the credit threshold. An agricultural producer reduces the phosphorus loss on the field from 4 to 1 lbs./acre/yr. through additional conservation practices. Because the credit threshold is 2 lbs./acre/yr., there is 1 lb./acre/year available as long-term credit and 2 lbs./acre/yr. available as interim credit.
>
> Interim Credits Available (available for first 5 yrs.): 2 lbs./acre/yr. (i.e., 4 - 2 = 2)
> Long-term Credits Available (available for the first 5 years and thereafter while the practice is maintained): 1 lb./acre/yr. (i.e., 2 - 1 = 1).
>
> In this example, 3 credits will be available for the first 5 years and 1 credit available thereafter.

Trade ratios also need to be applied to determine actual credits that can be used to determine compliance in the WPDES permit. See the WQT guidance for details (WDNR, 2013b, pp. 14-25).

In the WRB, there are several waterbodies with lower water quality criteria than streams and lakes located upstream of them. This results in TMDL allocations that can be split between allocations to meet local water quality and allocations to meet downstream water quality requirements. This has specific implications to both WQT and adaptive management. See Appendix O for more details.

The specific downstream waterbody associated with a downstream reduction is listed as a subbasin code in Tables 1.1 and 1.2. A lookup table has been provided to help find the waterbody.

Background on Translation and Framework Development

TMDL Percent Reductions

Originally, TMDL goals for each subbasin in the WRB were expressed as either LAs or percent reductions (an allowable load in lbs. or a percent reduction from the baseline scenario, respectively). These TMDL goals were estimated using SWAT. Within the SWAT model, varying landcovers, soils, and topographic slopes in the WRB were used to estimate pollutant loads at the outlet of each subbasin shown in Figures 1.1-1.4. Both the LAs and percent reductions from the baseline are associated with the instream load needed to meet water quality standards. There is typically a gradual loss of phosphorus as the load travels from upland sources downstream, so downstream LAs cannot always be directly applied to upland sources. To convert downstream LAs to upland yield targets ("TP Targets" in Table 1), WDNR translated inputs from the TMDL SWAT model into inputs to the SnapPlus model. The results can be used for assessing whether croplands are meeting TMDL load allocation targets. However, other BMPs not related to cropping practices can also be implemented to comply with the TMDL, for example water and sediment control basins or barnyard improvements. In these cases, modeling tools specific to these BMPs must be used for assessing whether load reductions meet TMDL goals.

Snap-Plus Translation

The original TMDL model, developed using SWAT, used agricultural inputs relating to the management of agricultural fields (cropping, tillage, fertilizer) to estimate phosphorus loss. SWAT used specific land-management operations that were mapped across the WRB. These agricultural inputs were translated into SnapPlus "fields" in a template database. Each specific land-management operation was spatially overlaid with soil type, subbasin, and county to derive discrete units to run in SnapPlus.

Each subbasin contains between 6 and 627 different soil types defined by the Web Soil Survey (or SSURGO) database. For each soil type within each subbasin, an average topographic slope was calculated by summarized Digital Elevation Model (DEM) gridcells in the National Elevation Dataset (NED), and an average soil phosphorus concentration was calculated by using an area-weighted average derived from county-level averages of soil phosphorus samples. SnapPlus was then run for each combination of subbasin, soil type (the critical soil was replaced with the predominant soil to represent average rather than critical conditions), topographic slope, and land management combination, which totaled 36,296 SnapPlus runs. The resulting phosphorus yields were then averaged for each subbasin to calculate baseline pollutant yields (Table 1). Applying the corresponding percent reduction to the baseline pollutant yield for each subbasin generates the LA, expressed as an edge of field target, and the credit threshold for water quality trading.

Additional Information

For practitioners and resource managers that are interested in using this method for TMDL implementation planning, please contact your WDNR non-point source coordinator: https://dnr.wi.gov/topic/nonpoint/npscontacts.html

Or, for dischargers who are interested in using this method for WQT, please contact your WDNR water quality trading coordinator: https://dnr.wi.gov/topic/surfaceWater/waterQualityTrading.html

References

Wisconsin Department of Natural Resources (2013a). A Water Quality Trading How To Manual: Guidance on Developing a Water Quality Trading Strategy Based on Protocols Specified in "Guidance for Implementing Water Quality Trading in WPDES Permits" (No. 3400-2013-03). http://dnr.wi.gov/topic/surfacewater/documents/WQT_howto_9_9_2013signed.pdf

Wisconsin Department of Natural Resources (2013b). Guidance for Implementing Water Quality Trading in WPDES Permits (No. 3800-2013-04). Retrieved from http://dnr.wi.gov/topic/surfacewater/documents/WQT_guidance_Aug_21_2013signed.pdf

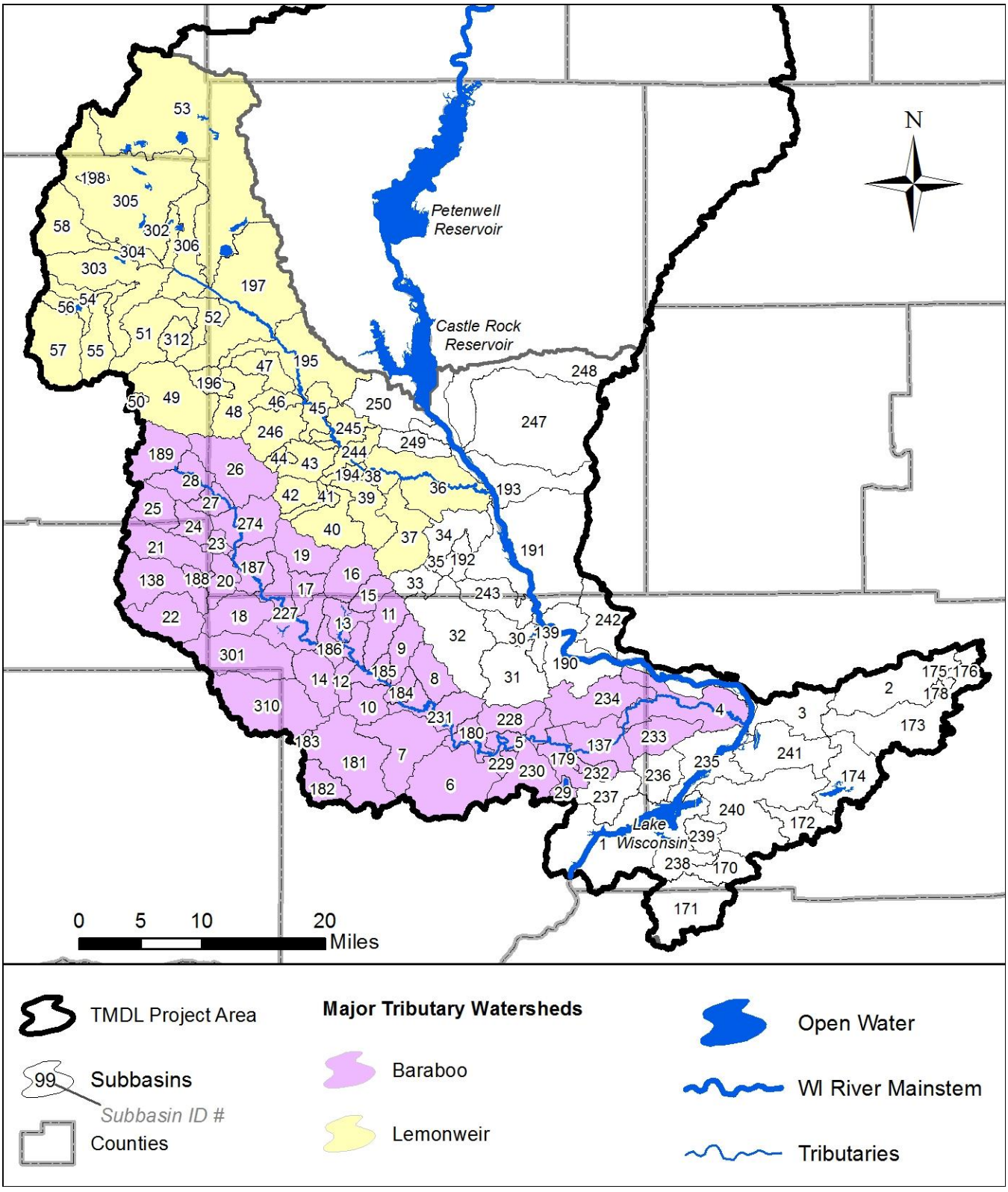

Figure 1.1 Map of subbasin delineations and associated subbasin codes for the lower basin. Subbasin codes can be used to find TMDL allocations in Appendices J and K.

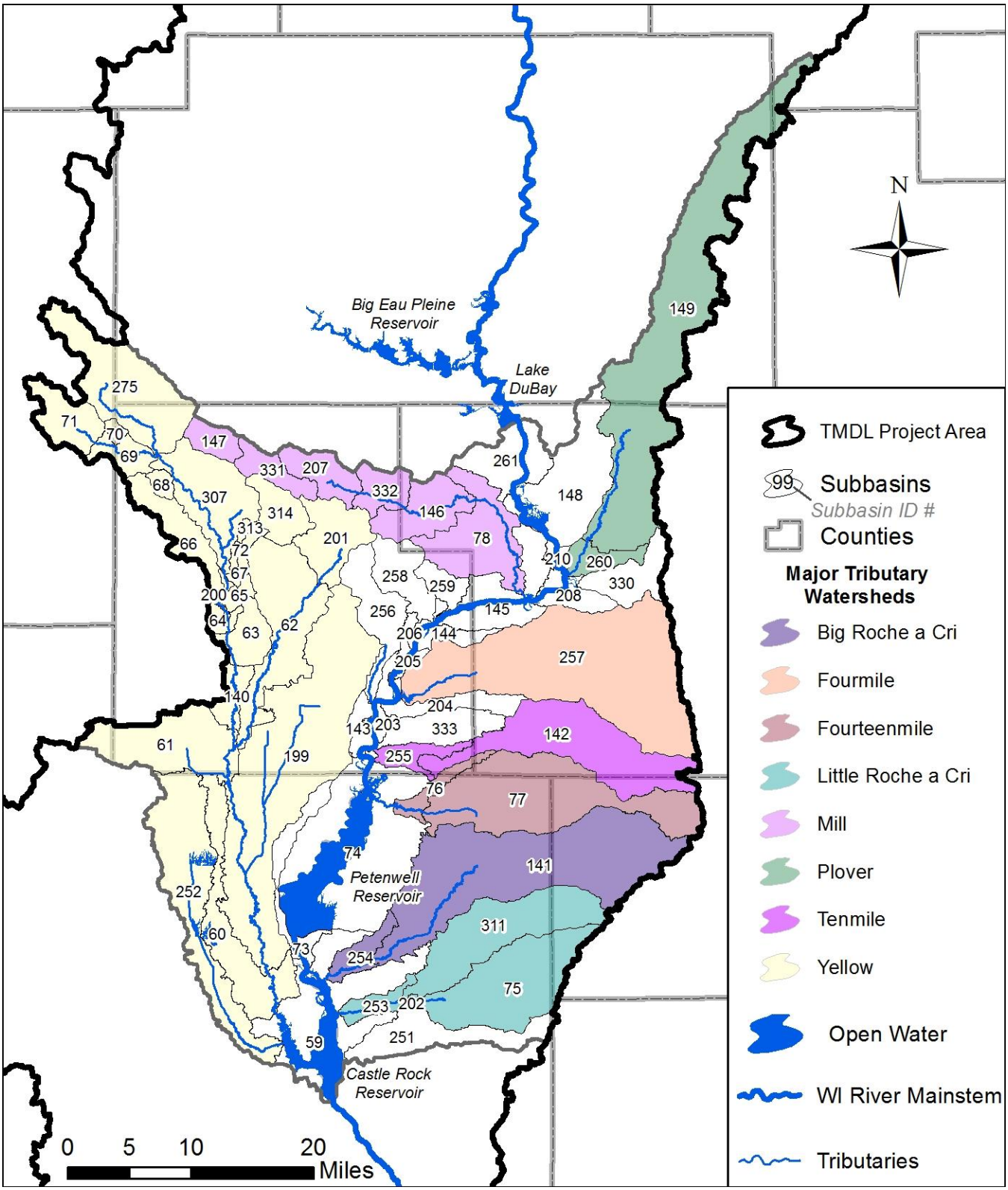

Figure 1.2 Map of subbasin delineations and associated subbasin codes for the central basin. Subbasin codes can be used to find TMDL allocations in Appendices J and K.

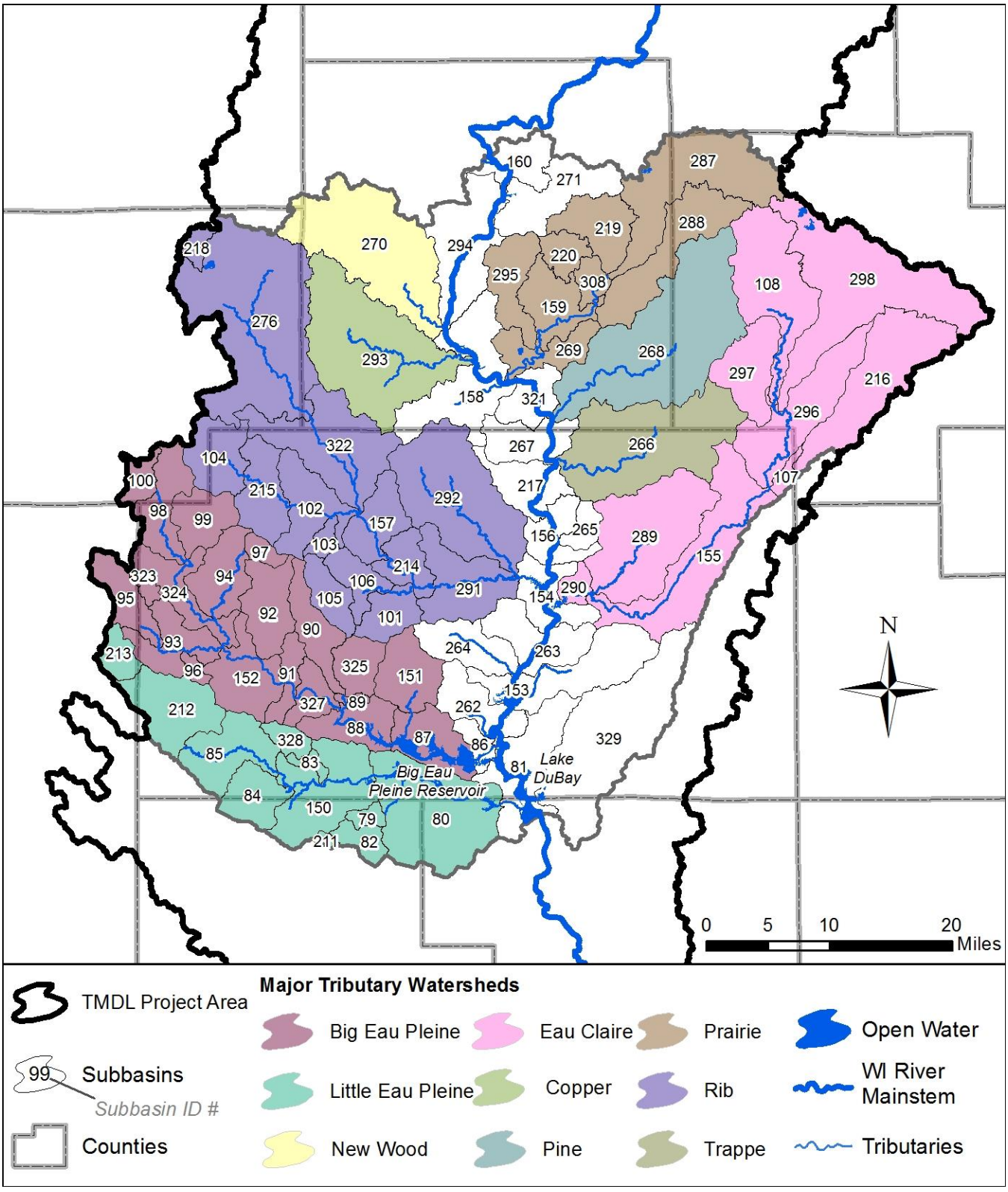

Figure 1.3 Map of subbasin delineations and associated subbasin codes for the upper basin. Subbasin codes can be used to find TMDL allocations in Appendices J and K.

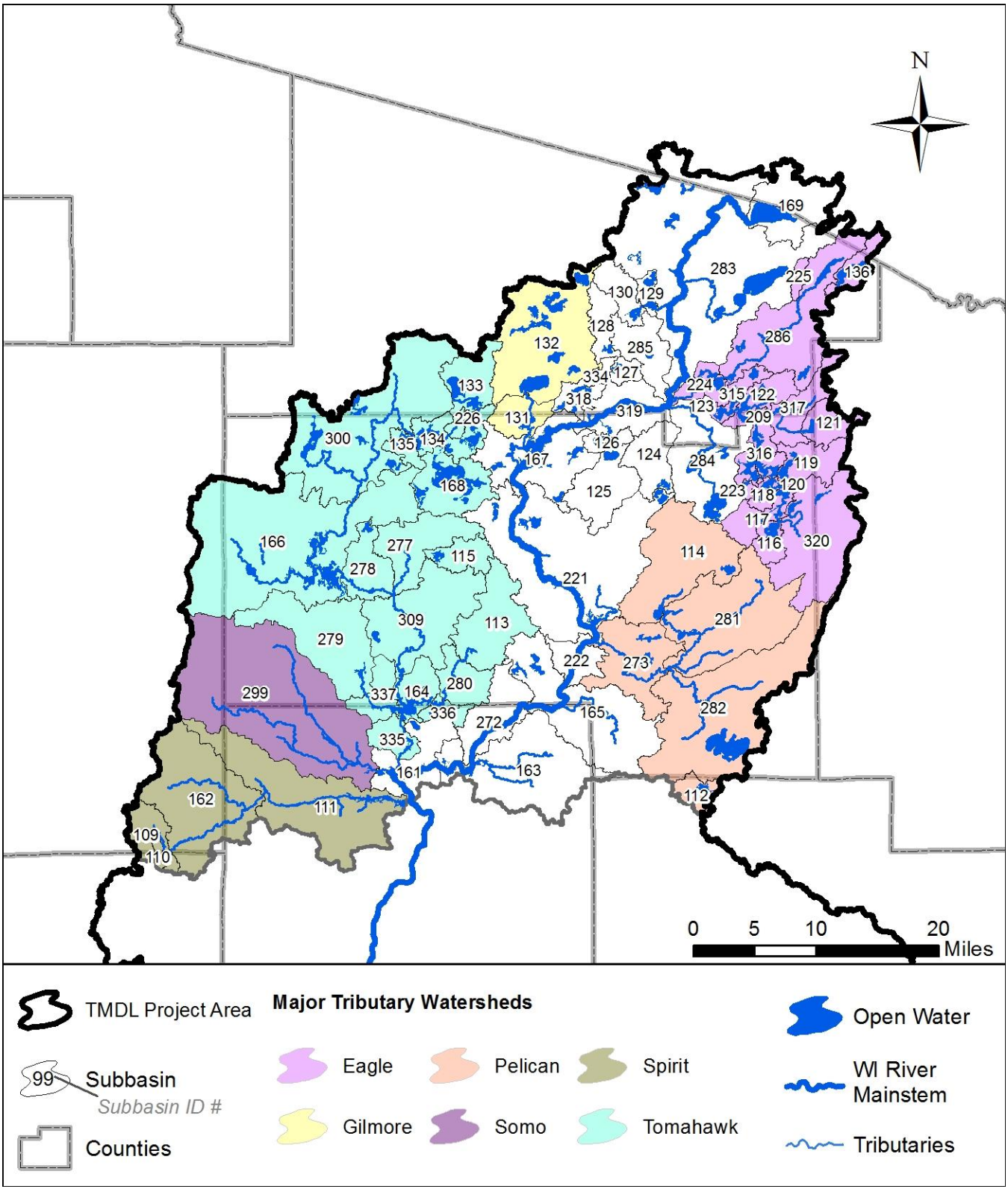

Figure 1.4 Map of subbasin delineations and associated subbasin codes for the headwaters basin. Subbasin codes can be used to find TMDL allocations in Appendices J and K.

Table 1.1 Agricultural total phosphorus (TP) targets by TMDL subbasin. TP Targets are shown both for the TMDL under existing criteria and the recommended site-specific criteria (SSC). Subbasin codes are associated with those shown in the subbasin maps in Figures 1.1-1.4.

Subbasin	Baseline TP	Translated TMDL Allocations			
		Current Criteria		Recommended SSC	
	(lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)
1	4.8	0%	4.8	63%	1.8
2	2.4	12%	2.1	63%	0.9
3	2.3	0%	2.3	63%	0.8
4	2.8	0%	2.8	63%	1.0
5	10.7	0%	10.7	63%	3.9
6	7.6	47%	4.0	63%	2.8
7	6.1	75%	1.5	75%	1.5
8	10.2	59%	4.2	63%	3.7
9	6.5	75%	1.6	75%	1.6
10	5.5	77%	1.3	77%	1.3
11	4.3	58%	1.8	63%	1.6
12	7.2	78%	1.6	78%	1.6
13	4.5	86%	0.6	86%	0.6
14	6.1	66%	2.1	66%	2.1
15	3.1	86%	0.4	86%	0.4
16	7.7	86%	1.1	86%	1.1
17	4.8	32%	3.2	63%	1.7
18	6.1	72%	1.7	72%	1.7
19	7.5	68%	2.4	68%	2.4
20	10.8	78%	2.4	78%	2.4
21	6.2	82%	1.1	82%	1.1
22	5.6	64%	2.0	64%	2.0
23	6.0	60%	2.4	63%	2.2
24	6.9	70%	2.0	70%	2.0
25	4.8	87%	0.6	87%	0.6
26	3.9	54%	1.8	63%	1.4
27	5.3	51%	2.6	63%	1.9
28	4.6	64%	1.6	64%	1.6
29	2.5	48%	1.3	63%	0.9
30	9.4	69%	3.0	69%	3.0
31	11.5	69%	3.6	69%	3.6
32	9.8	69%	3.1	69%	3.1
33	9.0	69%	2.8	69%	2.8
34	12.8	20%	10.2	63%	4.7
35	11.8	17%	9.9	63%	4.3
36	7.0	0%	7.0	63%	2.6
37	11.4	75%	2.9	75%	2.9
38	10.7	0%	10.7	63%	3.9
39	11.0	0%	11.0	63%	4.0
40	14.1	73%	3.8	73%	3.8
41	10.1	90%	1.0	90%	1.0
42	6.9	80%	1.4	80%	1.4

Table 1.1 Agricultural total phosphorus (TP) targets by TMDL subbasin. TP Targets are shown both for the TMDL under existing criteria and the recommended site-specific criteria (SSC). Subbasin codes are associated with those shown in the subbasin maps in Figures 1.1-1.4.

Subbasin	Baseline TP	Translated TMDL Allocations			
		Current Criteria		Recommended SSC	
	(lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)
43	6.0	0%	6.0	63%	2.2
44	3.8	77%	0.9	77%	0.9
45	5.9	0%	5.9	63%	2.1
46	3.9	75%	1.0	75%	1.0
47	3.6	71%	1.0	71%	1.0
48	3.8	57%	1.6	63%	1.4
49	4.8	73%	1.3	73%	1.3
50	5.4	72%	1.5	72%	1.5
51	4.2	93%	0.3	93%	0.3
52	4.1	0%	4.1	63%	1.5
53	2.7	0%	2.7	63%	1.0
54	4.2	83%	0.7	83%	0.7
55	5.0	75%	1.3	75%	1.3
56	4.1	27%	3.0	63%	1.5
57	4.7	83%	0.8	83%	0.8
58	4.6	75%	1.1	75%	1.1
59	9.7	0%	9.7	63%	3.5
60	4.9	0%	4.9	63%	1.8
61	2.6	0%	2.6	63%	0.9
62	3.3	0%	3.3	63%	1.2
63	3.1	54%	1.4	63%	1.1
64	3.4	79%	0.7	79%	0.7
65	3.6	90%	0.3	90%	0.3
66	3.6	89%	0.4	89%	0.4
67	3.1	88%	0.4	88%	0.4
68	4.2	84%	0.6	84%	0.6
69	3.9	85%	0.6	85%	0.6
70	3.7	85%	0.5	85%	0.5
71	3.5	70%	1.1	70%	1.1
72	3.5	93%	0.3	93%	0.3
73	3.3	0%	3.3	63%	1.2
74	6.1	79%	1.3	63%	2.2
75	4.9	0%	4.9	63%	1.8
76	2.8	79%	0.6	63%	1.0
77	3.9	79%	0.8	63%	1.4
78	4.4	79%	0.9	63%	1.6
79	3.5	79%	0.7	63%	1.3
80	3.8	79%	0.8	63%	1.4
81	3.3	79%	0.7	63%	1.2
82	3.9	79%	0.8	75%	1.0
83	3.9	79%	0.8	71%	1.1
84	3.6	79%	0.7	77%	0.8

Table 1.1 Agricultural total phosphorus (TP) targets by TMDL subbasin. TP Targets are shown both for the TMDL under existing criteria and the recommended site-specific criteria (SSC). Subbasin codes are associated with those shown in the subbasin maps in Figures 1.1-1.4.

Subbasin	Baseline TP	Translated TMDL Allocations			
		Current Criteria		Recommended SSC	
	(lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)
85	3.8	79%	0.8	75%	0.9
86	3.3	79%	0.7	63%	1.2
87	3.5	84%	0.6	84%	0.6
88	3.9	84%	0.6	84%	0.6
89	3.2	84%	0.5	84%	0.5
90	3.7	84%	0.6	84%	0.6
91	3.7	84%	0.6	84%	0.6
92	3.8	84%	0.6	84%	0.6
93	4.1	84%	0.7	84%	0.7
94	3.9	84%	0.6	84%	0.6
95	5.1	86%	0.7	86%	0.7
96	3.7	84%	0.6	84%	0.6
97	3.8	84%	0.6	84%	0.6
98	4.3	84%	0.7	84%	0.7
99	4.1	84%	0.7	84%	0.7
100	5.8	84%	0.9	84%	0.9
101	3.8	79%	0.8	63%	1.4
102	3.7	79%	0.8	67%	1.2
103	3.9	79%	0.8	67%	1.3
104	4.1	79%	0.8	63%	1.5
105	3.8	79%	0.8	68%	1.2
106	3.6	79%	0.7	63%	1.3
107	3.3	79%	0.7	63%	1.2
108	4.0	79%	0.8	63%	1.5
109	2.8	79%	0.6	63%	1.0
110	3.0	79%	0.6	63%	1.1
111	2.6	79%	0.5	63%	0.9
112	2.5	79%	0.5	63%	0.9
113	3.0	79%	0.6	63%	1.1
114	3.9	79%	0.8	63%	1.4
115	2.5	79%	0.5	63%	0.9
116	2.8	79%	0.6	63%	1.0
117	2.9	79%	0.6	63%	1.0
118	2.9	79%	0.6	63%	1.1
119	2.5	79%	0.5	63%	0.9
120	2.5	79%	0.5	63%	0.9
121	2.5	79%	0.5	63%	0.9
122	3.1	79%	0.6	63%	1.1
123	2.5	79%	0.5	63%	0.9
124	3.2	79%	0.7	63%	1.2
125	3.2	79%	0.7	63%	1.2
126	4.8	79%	1.0	63%	1.8

Table 1.1 Agricultural total phosphorus (TP) targets by TMDL subbasin. TP Targets are shown both for the TMDL under existing criteria and the recommended site-specific criteria (SSC). Subbasin codes are associated with those shown in the subbasin maps in Figures 1.1-1.4.

Subbasin	Baseline TP	Translated TMDL Allocations			
		Current Criteria		Recommended SSC	
	(lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)
127	3.5	79%	0.7	63%	1.3
128	2.5	79%	0.5	63%	0.9
129	2.5	79%	0.5	63%	0.9
130	2.6	79%	0.5	63%	1.0
131	2.5	79%	0.5	63%	0.9
132	2.5	79%	0.5	63%	0.9
133	2.5	56%	1.1	56%	1.1
134	2.5	56%	1.1	56%	1.1
135	2.5	56%	1.1	56%	1.1
136	2.5	79%	0.5	63%	0.9
137	11.5	0%	11.5	63%	4.2
138	6.2	81%	1.2	81%	1.2
139	2.5	0%	2.5	63%	0.9
140	2.5	0%	2.5	63%	0.9
141	4.2	0%	4.2	63%	1.5
142	4.6	79%	0.9	63%	1.7
143	2.7	79%	0.6	63%	1.0
144	3.6	79%	0.7	63%	1.3
145	3.6	79%	0.7	63%	1.3
146	4.4	79%	0.9	63%	1.6
147	3.8	79%	0.8	76%	0.9
148	3.3	79%	0.7	63%	1.2
149	3.8	79%	0.8	63%	1.4
150	3.6	79%	0.7	69%	1.1
151	3.8	84%	0.6	84%	0.6
152	3.9	84%	0.6	84%	0.6
153	3.0	79%	0.6	63%	1.1
154	3.1	79%	0.6	63%	1.1
155	3.2	79%	0.6	63%	1.2
156	3.5	79%	0.7	63%	1.3
157	3.8	79%	0.8	63%	1.4
158	3.4	79%	0.7	63%	1.2
159	2.9	79%	0.6	63%	1.1
160	2.6	79%	0.5	63%	1.0
161	2.6	80%	0.5	64%	0.9
162	3.2	79%	0.7	63%	1.2
163	2.8	79%	0.6	63%	1.0
164	3.1	79%	0.6	63%	1.1
165	4.1	79%	0.8	63%	1.5
166	2.6	79%	0.5	63%	0.9
167	2.7	79%	0.6	63%	1.0
168	2.5	56%	1.1	56%	1.1

Table 1.1 Agricultural total phosphorus (TP) targets by TMDL subbasin. TP Targets are shown both for the TMDL under existing criteria and the recommended site-specific criteria (SSC). Subbasin codes are associated with those shown in the subbasin maps in Figures 1.1-1.4.

Subbasin	Baseline TP	Translated TMDL Allocations			
		Current Criteria		Recommended SSC	
	(lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)
169	2.8	79%	0.6	63%	1.0
170	2.7	14%	2.3	63%	1.0
171	5.7	0%	5.7	63%	2.1
172	2.4	36%	1.5	63%	0.9
173	2.6	15%	2.2	63%	1.0
174	2.6	0%	2.6	63%	0.9
175	1.7	53%	0.8	63%	0.6
176	2.4	57%	1.0	63%	0.9
177	2.9	14%	2.5	63%	1.1
178	1.8	41%	1.1	63%	0.7
179	9.5	0%	9.5	63%	3.5
180	9.6	0%	9.6	63%	3.5
181	5.8	80%	1.2	80%	1.2
182	5.9	79%	1.2	79%	1.2
183	5.6	83%	0.9	83%	0.9
184	4.3	0%	4.3	63%	1.6
185	7.6	0%	7.6	63%	2.8
186	9.1	0%	9.1	63%	3.3
187	6.2	58%	2.6	63%	2.3
188	9.9	77%	2.2	77%	2.2
189	5.1	75%	1.3	75%	1.3
190	8.6	0%	8.6	63%	3.1
191	9.4	0%	9.4	63%	3.4
192	8.6	11%	7.6	63%	3.1
193	7.9	0%	7.9	63%	2.9
194	9.2	0%	9.2	63%	3.4
195	3.3	0%	3.3	63%	1.2
196	4.0	85%	0.6	85%	0.6
197	3.5	0%	3.5	63%	1.3
198	4.0	63%	1.5	63%	1.5
199	3.2	0%	3.2	63%	1.2
200	3.5	91%	0.3	91%	0.3
201	3.4	81%	0.6	81%	0.6
202	3.6	0%	3.6	63%	1.3
203	2.6	79%	0.5	63%	1.0
204	3.1	80%	0.6	63%	1.1
205	2.5	79%	0.5	63%	0.9
206	2.5	79%	0.5	63%	0.9
207	3.8	79%	0.8	63%	1.4
208	3.5	79%	0.7	63%	1.3
209	2.5	79%	0.5	63%	0.9
210	3.1	79%	0.6	63%	1.1

Table 1.1 Agricultural total phosphorus (TP) targets by TMDL subbasin. TP Targets are shown both for the TMDL under existing criteria and the recommended site-specific criteria (SSC). Subbasin codes are associated with those shown in the subbasin maps in Figures 1.1-1.4.

Subbasin	Baseline TP	Translated TMDL Allocations			
		Current Criteria		Recommended SSC	
	(lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)
211	3.5	79%	0.7	79%	0.7
212	4.1	82%	0.7	82%	0.7
213	6.2	89%	0.7	89%	0.7
214	3.7	79%	0.8	63%	1.3
215	3.7	79%	0.8	63%	1.3
216	2.7	79%	0.6	63%	1.0
217	3.3	79%	0.7	63%	1.2
218	2.9	79%	0.6	63%	1.1
219	2.8	79%	0.6	63%	1.0
220	2.8	79%	0.6	63%	1.0
221	3.1	79%	0.6	63%	1.1
222	3.1	79%	0.6	63%	1.1
223	3.7	79%	0.8	63%	1.4
224	4.4	79%	0.9	63%	1.6
225	2.5	79%	0.5	63%	0.9
226	2.5	59%	1.0	59%	1.0
227	5.2	63%	1.9	63%	1.9
228	10.4	72%	2.9	72%	2.9
229	13.4	62%	5.2	63%	4.9
230	11.4	19%	9.2	63%	4.2
231	8.8	0%	8.8	63%	3.2
232	7.8	0%	7.8	63%	2.8
233	3.9	0%	3.9	63%	1.4
234	8.0	0%	8.0	63%	2.9
235	2.7	0%	2.7	63%	1.0
236	2.8	0%	2.8	63%	1.0
237	4.9	0%	4.9	63%	1.8
238	2.8	0%	2.8	63%	1.0
239	3.2	0%	3.2	63%	1.2
240	2.7	0%	2.7	63%	1.0
241	2.5	0%	2.5	63%	0.9
242	3.4	5%	3.2	63%	1.2
243	6.4	2%	6.3	63%	2.3
244	7.0	0%	7.0	63%	2.6
245	7.8	0%	7.8	63%	2.8
246	3.6	76%	0.9	76%	0.9
247	9.9	0%	9.9	63%	3.6
248	6.6	0%	6.6	63%	2.4
249	5.7	0%	5.7	63%	2.1
250	4.0	0%	4.0	63%	1.5
251	5.1	0%	5.1	63%	1.9
252	2.5	0%	2.5	63%	0.9

Table 1.1 Agricultural total phosphorus (TP) targets by TMDL subbasin. TP Targets are shown both for the TMDL under existing criteria and the recommended site-specific criteria (SSC). Subbasin codes are associated with those shown in the subbasin maps in Figures 1.1-1.4.

Subbasin	Baseline TP	Translated TMDL Allocations			
		Current Criteria		Recommended SSC	
	(lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)
253	9.9	0%	9.9	63%	3.6
254	12.1	0%	12.1	63%	4.4
255	2.6	79%	0.5	63%	1.0
256	3.8	79%	0.8	63%	1.4
257	4.4	79%	0.9	63%	1.6
258	3.9	79%	0.8	63%	1.4
259	3.1	79%	0.6	63%	1.1
260	5.1	79%	1.0	63%	1.9
261	4.1	79%	0.8	63%	1.5
262	3.5	79%	0.7	63%	1.3
263	2.8	79%	0.6	63%	1.0
264	3.5	79%	0.7	63%	1.3
265	3.5	79%	0.7	63%	1.3
266	3.3	79%	0.7	63%	1.2
267	3.5	79%	0.7	63%	1.3
268	3.5	79%	0.7	63%	1.3
269	3.2	79%	0.6	63%	1.2
270	2.6	79%	0.5	63%	1.0
271	2.8	79%	0.6	63%	1.0
272	2.7	79%	0.6	63%	1.0
273	2.8	79%	0.6	63%	1.0
274	5.8	66%	2.0	66%	2.0
275	3.6	73%	1.0	73%	1.0
276	3.9	79%	0.8	63%	1.4
277	2.5	79%	0.5	63%	0.9
278	2.5	79%	0.5	63%	0.9
279	2.5	79%	0.5	63%	0.9
280	2.8	79%	0.6	63%	1.0
281	4.4	79%	0.9	63%	1.6
282	2.6	79%	0.5	63%	1.0
283	3.8	79%	0.8	63%	1.4
284	2.8	79%	0.6	63%	1.0
285	4.6	79%	0.9	63%	1.7
286	3.8	79%	0.8	63%	1.4
287	2.9	79%	0.6	63%	1.1
288	3.2	79%	0.7	63%	1.2
289	3.4	79%	0.7	63%	1.3
290	2.9	79%	0.6	63%	1.1
291	3.7	79%	0.8	63%	1.4
292	3.7	79%	0.8	63%	1.3
293	3.2	79%	0.7	63%	1.2
294	2.6	79%	0.5	63%	0.9

Table 1.1 Agricultural total phosphorus (TP) targets by TMDL subbasin. TP Targets are shown both for the TMDL under existing criteria and the recommended site-specific criteria (SSC). Subbasin codes are associated with those shown in the subbasin maps in Figures 1.1-1.4.

Subbasin	Baseline TP	Translated TMDL Allocations			
		Current Criteria		Recommended SSC	
	(lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)
295	3.0	79%	0.6	63%	1.1
296	3.3	79%	0.7	63%	1.2
297	3.4	79%	0.7	63%	1.3
298	3.1	79%	0.6	63%	1.1
299	2.6	79%	0.5	63%	0.9
300	2.6	79%	0.5	63%	1.0
301	5.2	71%	1.5	71%	1.5
302	2.7	0%	2.7	63%	1.0
303	4.2	77%	1.0	77%	1.0
304	4.2	64%	1.5	64%	1.5
305	3.7	0%	3.7	63%	1.3
306	3.5	0%	3.5	63%	1.3
307	3.5	78%	0.8	78%	0.8
308	3.0	79%	0.6	63%	1.1
309	3.2	79%	0.6	63%	1.2
310	6.1	74%	1.6	74%	1.6
311	3.5	0%	3.5	63%	1.3
312	4.3	17%	3.5	63%	1.6
313	3.7	64%	1.4	64%	1.4
314	3.6	72%	1.0	72%	1.0
315	2.5	79%	0.5	63%	0.9
316	3.4	79%	0.7	63%	1.2
317	2.5	79%	0.5	63%	0.9
318	2.5	79%	0.5	63%	0.9
319	2.5	79%	0.5	63%	0.9
320	3.0	79%	0.6	63%	1.1
321	3.4	79%	0.7	63%	1.3
322	3.7	79%	0.8	63%	1.4
323	3.7	84%	0.6	84%	0.6
324	4.0	84%	0.7	84%	0.7
325	3.7	84%	0.6	84%	0.6
326	3.0	84%	0.5	84%	0.5
327	3.7	84%	0.6	84%	0.6
328	4.0	87%	0.5	87%	0.5
329	3.2	79%	0.6	63%	1.2
330	4.7	79%	1.0	63%	1.7
331	3.8	79%	0.8	76%	0.9
332	4.4	79%	0.9	63%	1.6
333	2.8	79%	0.6	63%	1.0
334	2.5	79%	0.5	63%	0.9
335	2.5	79%	0.5	63%	0.9
336	3.2	79%	0.7	63%	1.2

Table 1.1 Agricultural total phosphorus (TP) targets by TMDL subbasin. TP Targets are shown both for the TMDL under existing criteria and the recommended site-specific criteria (SSC). Subbasin codes are associated with those shown in the subbasin maps in Figures 1.1-1.4.

Subbasin	**Baseline TP**	**Translated TMDL Allocations**			
		Current Criteria		Recommended SSC	
	(lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)
337	2.8	79%	0.6	63%	1.0

Table 1.2 Agricultural total phosphorus (TP) targets by 12-digit Hydrologic Unit Code (HUC12), which can be located using the Water Condition Viewer (see Usage section). TP Targets are shown both for the TMDL when existing criteria was used and when site-specific criteria (SSC) was used.

HUC12	Baseline TP	Translated TMDL Allocations			
		Current Criteria		Recommended SSC	
	(lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)
070700010101	3.8	79%	0.8	63%	1.4
070700010102	2.7	79%	0.6	63%	1.0
070700010103	2.5	79%	0.5	63%	0.9
070700010104	3.2	79%	0.7	63%	1.2
070700010201	3.2	79%	0.7	63%	1.2
070700010202	2.5	79%	0.5	63%	0.9
070700010203	2.8	79%	0.6	63%	1.0
070700010204	2.5	79%	0.5	63%	0.9
070700010205	3.2	79%	0.7	63%	1.2
070700010206	3.9	79%	0.8	63%	1.4
070700010301	2.5	79%	0.5	63%	0.9
070700010302	2.6	79%	0.5	63%	1.0
070700010303	2.5	79%	0.5	63%	0.9
070700010304	2.7	79%	0.6	63%	1.0
070700010305	3.2	79%	0.7	63%	1.2
070700010306	2.6	79%	0.5	63%	0.9
070700010307	4.4	79%	0.9	63%	1.6
070700010308	4.5	79%	0.9	63%	1.6
070700010401	2.8	79%	0.6	63%	1.0
070700010402	3.5	79%	0.7	63%	1.3
070700010403	2.8	79%	0.6	63%	1.0
070700010404	2.7	79%	0.6	63%	1.0
070700010501	2.5	79%	0.5	63%	0.9
070700010502	2.5	79%	0.5	63%	0.9
070700010503	2.5	79%	0.5	63%	0.9
070700010601	2.7	79%	0.6	63%	1.0
070700010602	3.4	79%	0.7	63%	1.2
070700010603	2.9	79%	0.6	63%	1.1
070700010701	2.7	79%	0.6	63%	1.0
070700010702	2.6	79%	0.5	63%	0.9
070700010703	3.5	79%	0.7	63%	1.3
070700010704	4.1	79%	0.8	63%	1.5
070700010705	5.0	79%	1.0	63%	1.8
070700010706	2.5	79%	0.5	63%	0.9
070700010707	2.5	79%	0.5	63%	0.9
070700010708	2.8	79%	0.6	63%	1.0
070700010801	2.5	57%	1.1	56%	1.1
070700010802	2.5	57%	1.1	56%	1.1
070700010803	2.7	72%	0.7	61%	1.0
070700010804	2.5	79%	0.5	63%	0.9

Table 1.2 Agricultural total phosphorus (TP) targets by 12-digit Hydrologic Unit Code (HUC12), which can be located using the Water Condition Viewer (see Usage section). TP Targets are shown both for the TMDL when existing criteria was used and when site-specific criteria (SSC) was used.

HUC12	Baseline TP	Translated TMDL Allocations			
		Current Criteria		Recommended SSC	
	(lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)
070700010805	2.7	79%	0.6	63%	1.0
070700010806	2.5	79%	0.5	63%	0.9
070700010901	2.5	79%	0.5	63%	0.9
070700010902	2.5	79%	0.5	63%	0.9
070700010903	2.5	79%	0.5	63%	0.9
070700010904	2.5	79%	0.5	63%	0.9
070700010905	2.5	79%	0.5	63%	0.9
070700010906	3.6	79%	0.7	63%	1.3
070700010907	2.6	79%	0.5	63%	1.0
070700011001	2.9	79%	0.6	63%	1.1
070700011002	2.5	79%	0.5	63%	0.9
070700011003	2.7	79%	0.6	63%	1.0
070700011004	2.9	79%	0.6	63%	1.1
070700011101	2.6	79%	0.5	63%	0.9
070700011102	2.6	79%	0.5	63%	0.9
070700011103	2.6	79%	0.5	63%	0.9
070700011104	2.5	79%	0.5	63%	0.9
070700011105	2.6	80%	0.5	63%	0.9
070700011201	3.0	79%	0.6	63%	1.1
070700011202	3.4	79%	0.7	63%	1.2
070700011203	2.6	79%	0.5	63%	1.0
070700011204	2.6	79%	0.5	63%	0.9
070700011301	3.1	79%	0.6	63%	1.1
070700011302	4.3	79%	0.9	63%	1.6
070700011303	2.8	79%	0.6	63%	1.0
070700011304	2.8	79%	0.6	63%	1.0
070700011305	2.7	79%	0.6	63%	1.0
070700011306	2.6	80%	0.5	64%	1.0
070700020101	2.6	79%	0.5	63%	0.9
070700020102	2.6	79%	0.5	63%	1.0
070700020201	2.6	79%	0.5	63%	1.0
070700020202	3.2	79%	0.7	63%	1.2
070700020203	3.4	79%	0.7	63%	1.3
070700020301	2.5	79%	0.5	63%	0.9
070700020302	2.8	79%	0.6	63%	1.0
070700020303	3.2	79%	0.7	63%	1.2
070700020304	3.1	79%	0.6	63%	1.1
070700020305	3.0	79%	0.6	63%	1.1
070700020306	3.1	79%	0.6	63%	1.1
070700020401	2.8	79%	0.6	63%	1.0

Table 1.2 Agricultural total phosphorus (TP) targets by 12-digit Hydrologic Unit Code (HUC12), which can be located using the Water Condition Viewer (see Usage section). TP Targets are shown both for the TMDL when existing criteria was used and when site-specific criteria (SSC) was used.

HUC12	Baseline TP	Translated TMDL Allocations			
		Current Criteria		Recommended SSC	
	(lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)
070700020402	2.6	79%	0.5	63%	0.9
070700020403	3.5	79%	0.7	63%	1.3
070700020404	3.1	79%	0.6	63%	1.1
070700020501	3.8	79%	0.8	63%	1.4
070700020502	3.6	79%	0.7	63%	1.3
070700020503	3.1	79%	0.6	63%	1.1
070700020504	3.6	79%	0.7	63%	1.3
070700020601	3.0	79%	0.6	63%	1.1
070700020602	3.6	79%	0.7	63%	1.3
070700020701	3.8	79%	0.8	63%	1.4
070700020702	3.7	79%	0.8	67%	1.2
070700020801	3.3	79%	0.7	63%	1.2
070700020802	2.6	79%	0.5	63%	0.9
070700020803	3.8	79%	0.8	63%	1.4
070700020804	4.9	79%	1.0	63%	1.8
070700020805	3.8	79%	0.8	63%	1.4
070700020806	3.8	79%	0.8	63%	1.4
070700020901	3.7	79%	0.8	63%	1.4
070700020902	3.6	79%	0.7	63%	1.3
070700021001	3.7	79%	0.8	65%	1.3
070700021002	3.7	79%	0.8	63%	1.4
070700021003	3.7	79%	0.8	63%	1.4
070700021101	2.6	79%	0.5	63%	1.0
070700021102	2.7	79%	0.6	63%	1.0
070700021103	2.7	79%	0.6	63%	1.0
070700021201	2.8	79%	0.6	63%	1.0
070700021202	3.4	79%	0.7	63%	1.2
070700021203	3.3	79%	0.7	63%	1.2
070700021204	4.0	79%	0.8	63%	1.5
070700021205	3.3	79%	0.7	63%	1.2
070700021301	3.2	79%	0.7	63%	1.2
070700021302	3.5	79%	0.7	63%	1.3
070700021303	3.3	79%	0.7	63%	1.2
070700021304	2.8	79%	0.6	63%	1.0
070700021401	3.5	79%	0.7	63%	1.3
070700021402	3.4	79%	0.7	63%	1.3
070700021403	3.2	79%	0.7	63%	1.2
070700021501	4.1	84%	0.7	84%	0.7
070700021502	4.7	84%	0.8	84%	0.8
070700021503	3.9	84%	0.6	84%	0.6

Table 1.2 Agricultural total phosphorus (TP) targets by 12-digit Hydrologic Unit Code (HUC12), which can be located using the Water Condition Viewer (see Usage section). TP Targets are shown both for the TMDL when existing criteria was used and when site-specific criteria (SSC) was used.

HUC12	Baseline TP	Translated TMDL Allocations			
		Current Criteria		Recommended SSC	
	(lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)
070700021504	4.5	85%	0.7	85%	0.7
070700021505	4.0	84%	0.7	84%	0.7
070700021506	3.8	84%	0.6	84%	0.6
070700021507	4.0	84%	0.6	84%	0.6
070700021601	3.7	84%	0.6	84%	0.6
070700021602	3.7	84%	0.6	84%	0.6
070700021603	3.8	84%	0.6	84%	0.6
070700021604	3.8	84%	0.6	84%	0.6
070700021701	4.7	84%	0.8	84%	0.8
070700021702	3.7	80%	0.7	78%	0.8
070700021703	3.6	79%	0.7	77%	0.8
070700021704	3.8	81%	0.7	74%	1.0
070700021705	3.6	79%	0.7	67%	1.2
070700021706	3.6	79%	0.7	68%	1.2
070700021707	3.9	79%	0.8	63%	1.4
070700021801	3.5	79%	0.7	63%	1.3
070700021802	3.0	79%	0.6	63%	1.1
070700021803	2.9	79%	0.6	63%	1.1
070700021804	3.5	79%	0.7	63%	1.3
070700021805	3.3	79%	0.7	63%	1.2
070700021806	2.9	79%	0.6	63%	1.1
070700021807	3.3	79%	0.7	63%	1.2
070700030101	3.5	79%	0.7	63%	1.3
070700030102	3.5	79%	0.7	63%	1.3
070700030103	4.0	79%	0.8	63%	1.5
070700030104	4.6	79%	0.9	63%	1.7
070700030201	3.8	79%	0.8	72%	1.1
070700030202	4.3	79%	0.9	63%	1.6
070700030203	4.4	79%	0.9	63%	1.6
070700030204	4.5	79%	0.9	63%	1.6
070700030301	3.0	79%	0.6	63%	1.1
070700030302	4.0	79%	0.8	63%	1.5
070700030303	4.7	79%	1.0	63%	1.7
070700030304	3.6	79%	0.7	63%	1.3
070700030305	3.9	79%	0.8	63%	1.4
070700030306	3.4	79%	0.7	63%	1.2
070700030401	4.5	79%	0.9	63%	1.7
070700030402	4.3	79%	0.9	63%	1.6
070700030403	3.9	79%	0.8	63%	1.4
070700030501	4.4	51%	2.1	63%	1.6

Table 1.2 Agricultural total phosphorus (TP) targets by 12-digit Hydrologic Unit Code (HUC12), which can be located using the Water Condition Viewer (see Usage section). TP Targets are shown both for the TMDL when existing criteria was used and when site-specific criteria (SSC) was used.

HUC12	Baseline TP	Translated TMDL Allocations			
		Current Criteria		Recommended SSC	
	(lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)
070700030502	4.6	79%	0.9	63%	1.7
070700030503	4.5	79%	0.9	63%	1.6
070700030504	3.4	79%	0.7	63%	1.3
070700030601	3.3	79%	0.7	63%	1.2
070700030602	4.2	79%	0.9	63%	1.5
070700030603	2.7	79%	0.6	63%	1.0
070700030701	3.4	79%	0.7	63%	1.2
070700030702	3.8	79%	0.8	63%	1.4
070700030703	2.9	79%	0.6	63%	1.1
070700030704	2.9	80%	0.6	63%	1.0
070700030705	6.2	79%	1.3	63%	2.3
070700030801	3.5	0%	3.5	63%	1.3
070700030802	2.9	0%	2.9	63%	1.1
070700030803	5.0	0%	5.0	63%	1.8
070700030804	10.9	0%	10.9	63%	4.0
070700030901	4.9	0%	4.9	63%	1.8
070700030902	3.2	0%	3.2	63%	1.2
070700030903	3.6	0%	3.6	63%	1.3
070700030904	7.7	0%	7.7	63%	2.8
070700031001	3.5	81%	0.7	81%	0.7
070700031002	3.5	74%	0.9	74%	0.9
070700031003	3.5	0%	3.5	63%	1.3
070700031004	3.3	18%	2.7	67%	1.1
070700031005	3.1	0%	3.1	63%	1.1
070700031101	3.8	73%	1.0	73%	1.0
070700031102	3.7	76%	0.9	76%	0.9
070700031103	3.5	73%	0.9	73%	0.9
070700031104	3.6	89%	0.4	89%	0.4
070700031105	3.5	79%	0.7	79%	0.7
070700031106	3.2	46%	1.7	70%	1.0
070700031201	3.0	0%	3.0	63%	1.1
070700031202	2.8	0%	2.8	63%	1.0
070700031301	2.9	0%	2.9	63%	1.1
070700031401	2.6	0%	2.6	63%	1.0
070700031402	2.7	0%	2.7	63%	1.0
070700031501	4.6	73%	1.3	79%	1.0
070700031502	4.4	77%	1.0	77%	1.0
070700031503	4.5	73%	1.2	73%	1.2
070700031504	4.4	78%	1.0	78%	1.0
070700031505	4.3	5%	4.1	63%	1.6

Table 1.2 Agricultural total phosphorus (TP) targets by 12-digit Hydrologic Unit Code (HUC12), which can be located using the Water Condition Viewer (see Usage section). TP Targets are shown both for the TMDL when existing criteria was used and when site-specific criteria (SSC) was used.

HUC12	Baseline TP	Translated TMDL Allocations			
		Current Criteria		Recommended SSC	
	(lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)
070700031506	3.7	0%	3.7	63%	1.4
070700031507	2.9	0%	2.9	63%	1.1
070700031508	3.5	0%	3.5	63%	1.3
070700031601	4.2	57%	1.8	81%	0.8
070700031602	3.5	0%	3.5	63%	1.3
070700031603	4.8	74%	1.3	74%	1.3
070700031604	3.7	59%	1.5	68%	1.2
070700031605	3.6	2%	3.5	64%	1.3
070700031701	11.4	51%	5.6	73%	3.1
070700031702	5.6	27%	4.1	68%	1.8
070700031703	11.4	75%	2.9	75%	2.9
070700031704	7.0	0%	7.0	63%	2.6
070700031801	13.4	0%	13.4	63%	4.9
070700031802	5.1	0%	5.1	63%	1.9
070700031803	7.2	0%	7.2	63%	2.6
070700031804	3.7	0%	3.7	63%	1.4
070700031805	6.6	0%	6.6	63%	2.4
070700031806	10.9	0%	10.9	63%	4.0
070700031807	7.9	0%	7.9	63%	2.9
070700031808	5.7	0%	5.7	63%	2.1
070700031809	8.2	0%	8.2	63%	3.0
070700031901	8.5	0%	8.5	63%	3.1
070700031902	12.2	18%	10.0	63%	4.5
070700031903	9.5	0%	9.5	63%	3.5
070700031904	9.7	69%	3.1	69%	3.1
070700031905	11.1	68%	3.5	69%	3.5
070700031906	7.5	1%	7.5	63%	2.8
070700031907	3.4	5%	3.2	63%	1.2
070700031908	8.3	0%	8.3	63%	3.1
070700040101	3.9	54%	1.8	63%	1.4
070700040102	4.9	67%	1.6	69%	1.5
070700040103	5.6	77%	1.3	77%	1.3
070700040104	5.6	64%	2.0	64%	2.0
070700040105	5.4	81%	1.0	81%	1.0
070700040106	6.2	82%	1.1	82%	1.1
070700040107	10.5	78%	2.3	78%	2.3
070700040108	6.1	65%	2.1	66%	2.1
070700040201	6.1	72%	1.7	72%	1.7
070700040202	6.8	56%	2.9	67%	2.3
070700040203	6.1	74%	1.6	74%	1.6

Table 1.2 Agricultural total phosphorus (TP) targets by 12-digit Hydrologic Unit Code (HUC12), which can be located using the Water Condition Viewer (see Usage section). TP Targets are shown both for the TMDL when existing criteria was used and when site-specific criteria (SSC) was used.

HUC12	Baseline TP	Translated TMDL Allocations			
		Current Criteria		Recommended SSC	
	(lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)	Reduction	TP Target (lb./acre/yr.)
070700040204	5.5	69%	1.7	69%	1.7
070700040205	6.3	86%	0.9	86%	0.9
070700040206	5.9	54%	2.7	63%	2.2
070700040207	6.2	54%	2.9	70%	1.9
070700040301	5.7	80%	1.2	80%	1.2
070700040302	6.3	76%	1.5	76%	1.5
070700040303	7.6	47%	4.0	63%	2.8
070700040304	9.3	17%	7.7	63%	3.4
070700040305	10.7	51%	5.3	68%	3.4
070700040401	11.4	19%	9.2	63%	4.2
070700040402	10.6	9%	9.6	63%	3.9
070700040403	3.9	0%	3.9	63%	1.4
070700040404	11.3	0%	11.3	63%	4.1
070700040405	8.0	0%	8.0	63%	2.9
070700040406	2.8	0%	2.8	63%	1.0
070700050101	2.6	15%	2.2	63%	1.0
070700050102	2.4	23%	1.8	63%	0.9
070700050103	2.6	0%	2.6	63%	0.9
070700050104	2.5	0%	2.5	63%	0.9
070700050105	2.5	1%	2.5	63%	0.9
070700050201	2.4	0%	2.4	63%	0.9
070700050202	2.7	11%	2.4	63%	1.0
070700050203	2.6	0%	2.6	63%	1.0
070700050204	4.5	3%	4.4	63%	1.6
070700050205	2.8	0%	2.8	63%	1.0
070700050206	5.1	0%	5.1	63%	1.9